

**§ 86.1777-99**

**40 CFR Ch. I (7-1-13 Edition)**

(b) In addition to the provisions of § 86.142, the following provisions apply to this subpart:

(1) The manufacturer shall record in the durability-data vehicle logbook, the number of regenerations that occur during the 50,000 mile durability test of each diesel light-duty vehicle and light-duty truck equipped with a periodically regenerating trap oxidizer system. The manufacturer shall include, for each regeneration: the date and time of the start of regeneration, the duration of the regeneration, and the accumulated mileage at the start and the end of regeneration. The number of regenerations will be used in the calculation of the deterioration factor or other durability demonstration under § 86.1823-01 and subsequent model year provisions.

(2) The requirements in Chapter 5 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996). These requirements are incorporated by reference (see § 86.1).

(3) For additional record requirements see §§ 86.1770, 86.1771, 86.1772, 86.1773, 86.1774, and 86.1777.

[62 FR 31242, June 6, 1997. Redesignated at 63 FR 987, Jan. 7, 1998, as amended at 64 FR 23925, May 4, 1999]

EFFECTIVE DATE NOTE: At 62 FR 31242, June 6, 1997, subpart R was added, effective Aug. 5, 1997. Section 86.1776-99 contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

**§ 86.1777-99 Calculations; exhaust emissions.**

The provisions of § 86.144 apply to this subpart, with the following exceptions and additions:

(a) The provisions of § 86.144(b) apply to this subpart, with the following additional requirement:

(1) Organic material non-methane hydrocarbon equivalent mass for ethanol vehicles:

$$\text{OMNMHCE}_{\text{mass}} = \text{NMHC}_{\text{mass}} + (13.8756/32.042) \times (\text{CH}_3\text{OH})_{\text{mass}} + (13.8756/46.064) \times (\text{CH}_3\text{CH}_2\text{OH})_{\text{mass}} + (13.8756/30.0262) \times (\text{HCHO})_{\text{mass}} + (13.8756/44.048) \times (\text{CH}_3\text{CHO})_{\text{mass}}$$

(2) [Reserved]

(b) The requirements in Chapter 5 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996) apply to this subpart. These requirements are incorporated by reference (see § 86.1).

(c) The provisions in appendix XV of this part and appendix XVI of this part apply to this subpart.

(d) *Reactivity adjustment factors.* (1) For the purpose of complying with the NMOG exhaust emission standards in §§ 86.1708 and 86.1709, the mass of NMOG emissions from a vehicle certified to operate on a fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operated on a fuel other than conventional gasoline, shall be multiplied by the reactivity adjustment factor applicable to the vehicle emission control technology category and fuel. The product of the NMOG mass emission value and the reactivity adjustment factor shall be compared to the NMOG exhaust emission standards to determine compliance with the standards. In addition to the above requirements, vehicles operating on natural gas shall add to the product of the NMOG mass emission value and the reactivity adjustment factor, the product of the methane mass emission value and the methane reactivity adjustment factor. This result shall be compared to the NMOG exhaust emission standards to determine compliance with the standards for natural gas-fueled vehicles.

(2) The following reactivity adjustment factors have been established pursuant to the criteria in appendix XVII of this part:

(i) Light-duty vehicles and light-duty trucks:

Vehicle emission control technology category	Fuel	Reactivity adjustment factor
TLEVs .....	85% methanol, 15% gasoline blends .....	0.41
LEVs and ULEVs through model year 2000 .....	85% methanol, 15% gasoline blends .....	0.41
TLEVs through model year 2000 .....	Gasoline meeting the specifications of § 86.1771(a)(1) .....	0.98
LEVs and ULEVs through model year 2000 .....	Gasoline meeting the specifications of § 86.1771(a)(1) .....	0.94

Vehicle emission control technology category	Fuel	Reactivity adjustment factor
TLEVs through model year 2000 .....	Fuel meeting the specifications for liquefied petroleum gas specified in Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996).	1.00
LEVs and ULEVs through model year 2000 .....	Fuel meeting the specifications for liquefied petroleum gas specified in Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996).	0.50
TLEVs through model year 2000 .....	Fuel meeting the specifications for natural gas specified in Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996).	1.00
LEVs and ULEVs through model year 2000 .....	Fuel meeting the specifications for natural gas specified in Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996).	0.43

(ii) Natural gas light-duty vehicles and light-duty trucks:

Vehicle emission control technology category	Methane reactivity adjustment factor
TLEVs .....	0.0043
LEVs and ULEVs .....	0.0047

(3) The Administrator may establish new reactivity adjustment factors pursuant to appendix XVII of this part in addition to those listed in paragraph (d)(2) of this section. The Administrator shall notify manufacturers in writing of the new reactivity adjustment factors within 30 days of their establishment.

(4) The Administrator may revise any reactivity adjustment factor listed in paragraph (d)(2) of this section or established by the Administrator pursuant to appendix XVII of this part if he or she determines that the revised reactivity adjustment factor is more representative of the ozone-forming potential of vehicle NMOG emissions based on the best available scientific knowledge and sound engineering judgment. The Administrator shall notify manufacturers in writing of any such reactivity adjustment factor at least 3 years prior to January 1 of the calendar year which has the same numerical designation as the model year for which the revised reactivity adjustment factor first becomes effective. However, manufacturers may use the revised reactivity adjustment factor in certifying any new engine family

whose certification application is submitted following such notification, if they so choose. Manufacturers may also continue to use the original reactivity adjustment factor for any existing engine family previously certified with that reactivity adjustment factor until a new durability-data vehicle is tested for that engine family.

(5) Manufacturers may request the use of a unique reactivity adjustment factor for a specific vehicle emission control technology category and fuel. The Administrator shall approve such requests in accordance with the conditions and procedures of appendix XVII of this part. For the purpose of calculating the reactivity adjustment factor as specified in appendix XVII of this part, the “g ozone potential per g NMOG” value for the vehicle emission control technology category and fuel system for which the manufacturer is requesting the use of a unique reactivity adjustment factor shall be divided by the “g ozone potential per g NMOG” value for a conventional gasoline-fueled vehicle established for the vehicle emission control technology category. The following “g ozone potential per g NMOG” values for conventional gasoline-fueled vehicle emission control technology categories have been established:

(i) Light-duty vehicles and light-duty trucks:

Vehicle emission control technology category	“g ozone potential per g NMOG” for con- vention- al gaso- line
All TLEVs .....	3.42
All 1993 and subsequent model-year LEVs and ULEVs .....	3.13

(ii) [Reserved]

[62 FR 31242, June 6, 1997. Redesignated at 63 FR 987, Jan. 7, 1998]

**§ 86.1778–99 Calculations; particulate emissions.**

The provisions of § 86.145 and appendix XVI of this part apply to this subpart.

[62 FR 31242, June 6, 1997. Redesignated at 63 FR 987, Jan. 7, 1998]

**§ 86.1779–99 General enforcement provisions.**

(a) The provisions of sections 203–208 of the Clean Air Act, as amended, (42 U.S.C. 7522–7525, 7541–7542) apply to all motor vehicles manufactured by a covered manufacturer under this program, and to all covered manufacturers and all persons with respect to such vehicles.

(b) Violation of the requirements of this subpart shall subject a person to the jurisdiction and penalty provisions of sections 204–205 of the Clean Air Act (42 U.S.C. 7522–7523).

(c) EPA may not issue a certificate of conformity to a covered manufacturer, as defined in § 86.1702, except based on compliance with the standards and requirements in this part 86 and 40 CFR part 85.

[62 FR 31242, June 6, 1997. Redesignated at 63 FR 987, Jan. 7, 1998]

**§ 86.1780–99 Prohibited acts.**

(a) The following acts and the causing thereof are prohibited:

(1) In the case of a covered manufacturer, as defined by § 86.1702, of new motor vehicles or new motor vehicle engines for distribution in commerce, the sale, or the offering for sale, or the introduction, or delivery for introduction, into commerce, or (in the case of any person, except as provided by regulation of the Administrator), the im-

portation into the United States of any new motor vehicle or new motor vehicle engine subject to this subpart, unless such vehicle or engine is covered by a certificate of conformity issued (and in effect) under regulations found in this subpart (except as provided in sec. 203(b) of the Clean Air Act (42 U.S.C. 7522(b)) or regulations promulgated thereunder).

(2)(i) For any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under sec. 208 of the Clean Air Act (42 U.S.C. 7542) with regard to covered vehicles.

(ii) For a person to fail or refuse to permit entry, testing, or inspection authorized under sec. 206(c) (42 U.S.C. 7525(c)) or sec. 208 of the Clean Air Act (42 U.S.C. 7542) with regard to covered vehicles.

(iii) For a person to fail or refuse to perform tests, or to have tests performed as required under sec. 208 of the Clean Air Act (42 U.S.C. 7542) with regard to covered vehicles.

(iv) For a person to fail to establish or maintain records as required under §§ 86.1723 and 86.1776 with regard to covered vehicles.

(v) For any manufacturer to fail to make information available as provided by regulation under sec. 202(m)(5) of the Clean Air Act (42 U.S.C. 7521(m)(5)) with regard to covered vehicles.

(3)(i) For any person to remove or render inoperative any device or element of design installed on or in a covered vehicle or engine in compliance with regulations under this subpart prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.

(ii) For any person to manufacture, sell or offer to sell, or install, any part or component intended for use with, or as part of, any covered vehicle or engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a covered vehicle or engine in compliance with regulations issued under this subpart, and where the person knows or